



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/546,187	04/10/2000	Kazunori Hashimoto	Q58785	2981

7590 08/26/2003

Sughrue Mion Zinn Macpeak & Seas PLLC
2100 Pennsylvania Avenue NW
Washington, DC 20037

EXAMINER

HOYE, MICHAEL W

ART UNIT	PAPER NUMBER
----------	--------------

2614

8

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/546,187

Applicant(s)

HASHIMOTO, KAZUNORI

Examiner

Michael W. Hoye

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/13/03 have been fully considered but they are not persuasive.

Regarding independent claims 1 and 5, the Applicant argues that, "Each management function cited by the Examiner recites multiple independent activities (i.e. profiling viewers, tracking source tapes), none of which discloses the claimed channel contrastive table for comparing a management number allocated to an analog program and a channel display number."

The Applicant also submits that, "the disclosed concept and method of mapping a "virtual" or "nonexistent" channel into a local headend channel fails to teach or disclose the use of the claimed management numbers and channel display numbers in a channel contrastive table."

The Applicant further submits that, "[since] Hendricks '350 fails to teach or disclose a channel contrastive table. Therefore, Hendricks '350 likewise fails to teach or suggest that set top terminal 220 stores the claimed channel contrastive table. Thus, ...set top terminal 220 fails to disclose the claimed terminals."

In response, the Examiner respectfully disagrees with the applicant because the Hendricks '350 patent discloses in col. 27, lines 14-16, that the basic database structure at the Operations Center '202 consists of multiple tables, which contain one or more data records, each with multiple fields. In the SERVICE Database file 503 (see col. 28, lines 12-37), Hendricks

Art Unit: 2614

'350 discloses that a service ID is used to identify the virtual channel used for the desired service (lines 22-23), which is similar to or the same as the claimed management number that is allocated to each analog program. Moreover, Hendricks '350 discloses that every service also has an assigned local channel (line 28), and that the headend performs an equivalent function of a "channel map" that is transmitted to the set-top terminals (col. 28 lines 32-33, also see col. 8, lines 15-22), which is similar to or the same as the claimed channel display number of an analog program that is commonly used in the area to which each terminal belongs. In addition, the Hendricks '350 patent discloses a subscriber region designation 926, that is also transmitted to the set-top terminals in the program information signal (see col. 20 lines 50-67 and Figs. 6a and 6b), and is equivalent to the claimed area code used to recognize the area to which each terminal belongs. Although the Hendricks '350 patent does not explicitly use the terminology of a "channel contrastive table", it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of the Hendricks '350 patent in a similar manner for comparing a service ID number or management number to a local area channel display number as described above for the benefit of using a universal service or management number for a channel transmitted to various areas while still allowing the users at each terminal in different areas to access the channel with a display number that is used and known in their local area.

As to claims 2-4, the Applicant makes the same argument as for claim 1 based on the claims dependency to claim 1.

In response, the Examiner respectfully disagrees with the applicant for the reasons of obviousness as presented above for claim 1.

As to independent claim 5, the Applicant makes the same argument as presented above for claim 1.

In response, the Examiner respectfully disagrees with the applicant for the reasons of obviousness as presented above for claim 1.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 6 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al (USPN 5,659,350), cited by the applicant.

As to claim 1, note the Hendricks et al reference which discloses a CATV conditional access system. The claimed plurality of analog head ends for distributing picture signals of analog programs and picture signals of transmitted digital programs to terminals provided in a plurality of areas is met by cable headend 208 as shown in Figs. 1 and 3, where picture signals of an analog programs and transmitted digital programs (216 in Fig. 3) are distributed to set top terminals 220 in Figs. 1 & 3 (col. 7, line 61 – col. 8, line 14). The claimed digital head end for transmitting the picture signals of the digital programs to the plurality of analog head ends is met by operations center 202 in Figs. 1-3 (col. 7, line 61 – col. 8, line 14 & lines 23-37). The claimed said digital head end transmits to the terminals within the areas, data containing both an area code used to recognize the area to which each terminal belongs is met by demographic data

Art Unit: 2614

(col. 7, lines 46-48 & col. 16, lines 10-18) including subscriber region designation 926 in Figs. 6a and 6b (col. 20 lines 50-67). The Hendricks '350 patent discloses in col. 27, lines 14-16, that the basic database structure at the Operations Center 202 consists of multiple tables, which contain one or more data records, each with multiple fields. In the SERVICE Database file 503 (see col. 28, lines 12-37), Hendricks '350 discloses that a service ID is used to identify the virtual channel used for the desired service (lines 22-23), which is similar to or the same as the claimed management number that is allocated to each analog program. Moreover, Hendricks '350 discloses that every service also has an assigned local channel (line 28), and that the headend performs an equivalent function of a "channel map" that is transmitted to the set-top terminals (col. 28 lines 32-33, also see col. 8, lines 15-22), which is similar to or the same as the claimed channel display number of an analog program that is commonly used in the area to which each terminal belongs. In addition, the Hendricks '350 patent discloses a subscriber region designation 926, that is also transmitted to the set-top terminals in the program information signal (see col. 20 lines 50-67 and Figs. 6a and 6b), and is equivalent to the claimed area code used to recognize the area to which each terminal belongs. Although the Hendricks '350 patent does not explicitly use the terminology of a "channel contrastive table", it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of the Hendricks '350 patent in a similar manner for comparing a service ID number or management number to a local area channel display number as described above for the benefit of using a universal service or management number for a channel transmitted to various areas while still allowing the users at each terminal in different areas to access the channel with a display number that is used and known in their local area. The claimed each of said terminals stores

Art Unit: 2614

thereinto the area code and the channel contrastive table is met by the obviousness of the subscriber region and channel map, etc. as described above (also see col. 10, lines 57-67; col. 17, lines 50-67, and col. 29, lines 42-45), and retrieves the corresponding management numbers by comparing the channel display numbers of the analog programs set for each area and the area code is met by col. 11, lines 34-39; and then displays the channel display number of the analog program of the retrieved management number is met by col. 10, lines 57-67; and col. 11, lines 34-39.

As to claim 2, the claimed CATV conditional access system wherein both the data indicative of the area code and the data indicative of the channel contrastive table are transmitted from said digital head end to the terminals of the respective areas respectively via a channel used to transmit the picture signal is met by the operations center 202 and it's computer assisted packaging equipment (CAP) packages the programs and then creates a program control information signal that is delivered with the program package to the headend 208 and/or set top terminal 220 (see col. 17, lines 15-27 & 50-67 and col. 32, lines 21-49 – specifically lines 45-49 where the program control information is added to the programs to form a single signal for transmission).

As to claim 6, the claimed CATV conditional access system wherein both the data indicative of the area code and the data indicative of the channel contrastive table are transmitted from said digital head end to the terminals of the respective areas respectively via a data transmission channel which is separately provided with the channel for transmitting the picture signal is met by the operations center 202 and it's computer assisted packaging equipment (CAP) packages the programs and then creates a program control information signal that is delivered

Art Unit: 2614

with the program package to the headend 208 and/or set top terminal 220 (see col. 8, lines 15-22).

As to claim 5, note the Hendricks et al reference which discloses a CATV conditional access method. The claimed step of providing a plurality of analog head ends for distributing picture signals of analog programs and picture signals of transmitted digital programs to terminals provided in a plurality of areas is met by cable headend 208 as shown in Figs. 1 and 3, where picture signals of analog programs and transmitted digital programs (216 in Fig. 3) are distributed to terminals 220 in Figs. 1 and 3 (col. 7, line 61 – col. 8, line 14). The claimed step of providing a digital head end for transmitting the picture signals of digital programs to the plurality of analog head ends is met by operations center 202 in Figs. 1-3 (col. 7, line 61 – col. 8, line 14 & lines 23-37). The claimed step of transmitting to the terminals within the areas, data containing both an area code used to recognize the area to which the area belongs is met by demographic data (col. 7, lines 46-48 & col. 16, lines 10-18), including subscriber region designation 926 in Figs. 6a and 6b (col. 20 lines 50-67). The Hendricks '350 patent discloses in col. 27, lines 14-16, that the basic database structure at the Operations Center 202 consists of multiple tables, which contain one or more data records, each with multiple fields. In the SERVICE Database file 503 (see col. 28, lines 12-37), Hendricks '350 discloses that a service ID is used to identify the virtual channel used for the desired service (lines 22-23), which is similar to or the same as the claimed management number that is allocated to each analog program. Moreover, Hendricks '350 discloses that every service also has an assigned local channel (line 28), and that the headend performs an equivalent function of a "channel map" that is transmitted to the set-top terminals (col. 27 lines 32-33, also see col. 8, lines 15-22), which is similar to or

Art Unit: 2614

the same as the claimed channel display number of an analog program that is commonly used in the area to which each terminal belongs. In addition, the Hendricks '350 patent discloses a subscriber region designation 926, that is also transmitted to the set-top terminals in the program information signal (see col. 20 lines 50-67 and Figs. 6a and 6b), and is equivalent to the claimed area code used to recognize the area to which each terminal belongs. Although the Hendricks '350 patent does not explicitly use the terminology of a "channel contrastive table", it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of the Hendricks '350 patent in a similar manner for comparing a service ID number or management number to a local area channel display number as described above for the benefit of using a universal service or management number for a channel transmitted to various areas while still allowing the users at each terminal in different areas to access the channel with a display number that is used and known in their local area. The claimed step of storing in each of said terminals the area code and the channel contrastive table is met by the obviousness of the subscriber region and channel map, etc. as described above which are sent to and stored in the set top terminals (see col. 10, lines 57-67; col. 17, lines 50-67, and col. 29, lines 42-45). The claimed step of retrieving the corresponding management numbers from the channel contrastive table by comparing the channel display numbers of the analog programs set for each area and the area code is met by the obvious similarities as described above and in col. 11, lines 34-39. The claimed step of displaying the analog program of the retrieved management number is met by col. 10, lines 57-67; and col. 11, lines 34-39.

Art Unit: 2614

4. Claims 3, 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al (USPN 5,659,350), cited by the applicant, in view of Hendricks et al (USPN 5,990,927), cited by the examiner.

As to claim 3, the claimed CATV conditional access system wherein said digital head end transmits data about an analog channel transmission frequency contrastive table to the terminals within the plurality of areas, said analog channel transmission frequency contrastive table comparing the management number with a transmission frequency of an analog program within each of the areas is met by in part by the Hendricks et al (5,659,350) reference (see col. 7, lines 46-48 & col. 16, lines 10-18) including subscriber region designation 926 in Figs. 6a and 6b (col. 20 lines 50-67) and allocating different frequency ranges (col. 9, lines 20-28). As described above in claim 1, the Hendricks '350 patent discloses in col. 27, lines 14-16, that the basic database structure at the Operations Center 202 consists of multiple tables, which contain one or more data records, each with multiple fields. In the SERVICE Database file 503 (see col. 28, lines 12-37), Hendricks '350 discloses that a service ID is used to identify the virtual channel used for the desired service (lines 22-23), which is similar to or the same as the claimed management number that is allocated to each analog program. Moreover, Hendricks '350 discloses that every service also has an assigned local channel (line 28), and that the headend performs an equivalent function of a "channel map" that is transmitted to the set-top terminals (col. 27 lines 32-33, also see col. 8, lines 15-22), which is similar to or the same as the claimed channel display number of an analog program that is commonly used in the area to which each terminal belongs. In addition, the Hendricks '350 patent discloses a subscriber region designation 926, that is also transmitted to the set-top terminals in the program information

Art Unit: 2614

signal (see col. 20 lines 50-67 and Figs. 6a and 6b), and is equivalent to the claimed area code used to recognize the area to which each terminal belongs. Furthermore, Hendricks discloses in col. 33, line 33 – col. 34, line 4 & col. 35, line 20 – col. 36, line 6 frequency/bandwidth allocation. Although the 5,659,350 Hendricks et al reference does not specifically disclose a “frequency contrastive table” in as claimed, the related application, Hendricks et al (USPN 5,990,927) meets the claimed each of the terminals stores thereinto the analog channel transmission contrastive table, such that when a channel display number of an analog program is designated, said each terminal retrieves a management number corresponding to the designated channel display number from the channel contrastive table based upon the area code, and said each terminal retrieves a transmission frequency contrastive table so as to be tuned to the retrieved transmission frequency as disclosed in col. 9, lines 7-30 and col. 25, lines 43-60. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the CATV conditional access system of Hendricks et al (5,659,350) with the additional teachings of the related Hendricks et al (5,990,927) reference, which discloses in more detail tuning to a transmission frequency related to a service ID or management number. One of ordinary skill in the art would have been led to make such a modification since the two Hendricks et al references are related to the same system, moreover, it is well known to have analog transmission frequency contrastive tables related to a management or reference ID number in terminal channel maps associated with video distribution systems.

As to claim 4, the Hendricks et al (5,659,350) reference further meets the claimed CATV conditional access system wherein the data indicative of the analog channel transmission frequency contrastive table are transmitted from said digital head end to the terminals of the

Art Unit: 2614

respective areas respectively via a channel used to transmit the picture signal is met by the operations center 202 and it's computer assisted packaging equipment (CAP) packages the programs and then creates a program control information signal that is delivered with the program package to the headend 208 and/or set top terminal 220 (see col. 17, lines 15-27 & 50-67 and col. 32, lines 21-49 – specifically lines 45-49 where the program control information is added to the programs to form a single signal for transmission).

As to claim 7, the claimed CATV conditional access system wherein the data indicative of the analog channel transmission frequency contrastive table are transmitted from said digital head end to the terminals of the respective areas respectively via a data transmission channel which is separately provided with the channel for transmitting the picture signal is met by the Hendricks reference as described above in claim 4 where the operations center 202 and it's computer assisted packaging equipment (CAP) packages the programs and then creates a program control information signal that is delivered with the program package to the headend 208 and/or set top terminal 220 (see col. 8, lines 15-22).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 2614

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is (703) 305-6954.

The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (703) 305-4795.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:


(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Art Unit: 2614

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Michael W. Hoyer
August 22, 2003



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600